



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/545,137	04/07/2000	Michael D. Mabry	1069 1030	2020

7590 10/17/2003

John S Pratt
KILPATRICK STOCKTON LLP
2400 Monarch Tower
3424 Peachtree Road, N.E.
Atlanta, GA 30326-1757

EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS4

Office Action Summary	Application No.		Applicant(s)	
	09/545,137		MABRY ET AL.	
	Examiner		Art Unit	
	Alexis Wachtel		1764	

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,6,7,15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,8-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,4,8-14 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,053,348 to Morch in view of US 5,997,003 to Turner.

Morch teaches a sealable lid assembly:

Per claim 1: A flange(12) surrounding the manhole; a shaft (26) extending outwardly from the vessel proximate the manhole; a lid (20) pivotally and telescopically mounted to the shaft capable of releasably and sealably engaging the flange; a protrusion (22) extending outwardly from the lid; at least one elongated track (32) extending outwardly from the vessel in a position to engage the at least one wheel and raise the lid vertically above the flange as the lid pivots; and at least one clamp assembly (14) releasably contacting the lid into sealable engagement with the flange.

Morch fails to teach at least one wheel rotatably mounted to the lid. However, Morch teaches the use of two ball bearings (28) and (30) that allow for pivoting of the lid. Since wheels are equivalently useful for allowing the lid to glide on the track (32), it would have been obvious to one of ordinary skill to have replaced the ball bearings disclosed by Morch with wheels.

Morch fails to teach a flange surrounding the manhole and extending outwardly

Art Unit: 1764

from the vessel to a distal end; at least one wall extending from the flange proximate the distal end to define a channel. Turner teaches that prior art annular seal assemblies have used a U-shaped section with expander rings (gasket) positioned in the space between the two legs of the ring to, either mechanically or in response to pressure urge the expander ring inwardly (gasket) of the legs to wedge the legs outward into sealing engagement with the facing cylindrical surfaces to effectively seal across the annulus between such surfaces (Col 1, lines 24-30). In view of this teaching it would have been obvious to have modified the flange disclosed by Morch to include a U-shaped section disposed on its surface with an expander ring (gasket) positioned in the space between the U-shaped section so that said expander ring (gasket) would seal the U-shaped section in response to mechanical engagement with the protrusion disclosed by Morch. One of ordinary skill would have been motivated by the desire to improve the quality of the seal between the lid and flange. Additionally, Morch and Turner fails to illustrate that the flange extends outwardly. However, this minor deficiency is seen as an obvious matter of design choice.

Per claim 2 and 13: further comprising a handle (14) extending outwardly from the lid for assisting an operator in pivoting the lid. Examiner notes that a clamp assembly (14,16,18) per the prior art is capable of being used as a handle.

Per claims 4 and 14: Morch as set forth above fails to teach a gasket disposed within the channel releasably and sealably engaging the protrusion. (See rejection of claim 1)

Per claim 9 and 19: Morch and Turner as set forth above fails to teach that

Art Unit: 1764

insulation is disposed within the cavity. (See rejection of claim 8)

Per claim 10: wherein the protrusion (22) extends from the bottom.

Per claim 11: Morch as set forth above fails to explicitly teach that the at least one track has a rounded shoulder and an elongated ramp extending from the shoulder along an angle 30 deg to about 45 deg with respect to the distal end of the flange. However, it would have been an obvious matter of design choice to have configured the rolling mechanism on the lid assembly to allow for the lid rollers to roll over the track having the claimed angle absent a showing by Applicant that specific performance enhancements are achieved.

Per claim 12: a flange extending outwardly from the vessel to a distal end and surrounding the opening to define a manhole; at least one wall extending from the flange proximate the distal end to define a channel for receiving a gasket; a lid pivotally and telescopically mounted to the vessel capable of releasably and sealably engaging the gasket disposed within the channel; at least one wheel rotatably mounted to the lid; at least one elongated track extending outwardly from the vessel in a position to engage the at least one wheel and raise the lid vertically above the flange as the lid pivots; and at least one clamp assembly releasably contracting the lid into sealable engagement with the flange.

Per claim 18: further comprising a protrusion (22) extending from the bottom and insertable into the channel.

Per claim 20: Morch as set forth above fails to explicitly teach that the at least one track has a rounded shoulder and an elongated ramp extending from the shoulder

Art Unit: 1764

along an angle of about 30deg to about 60deg with respect to the distal end of the flange. However, it would have been an obvious matter of design choice to have configured the rolling mechanism on the lid assembly to allow for the lid rollers to roll over the track having the claimed angle absent a showing by Applicant that specific performance enhancements are achieved.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,053,348 to Morch in view of US 5,997,003 to Turner further in view of US 5,551,706 to Barna et al.

Morch and Turner as set forth above fails to teach that the gasket either comprises or is coated with tetrafluoroethylene fluorocarbon polymer, a fluorinated ethylene-propylene resin, or a mixture thereof. Barna et al teach an improved gasket material for use in a variety of sealing arrangements. The basic material of the present invention comprises a core of polytetrafluoroethylene (PTFE) wrapped in combination with one or more high strength films. When placed under compression in a joint, the composite gasket material of the present invention has proven to be highly resistant to cold flow or "creep," while providing all the exceptional properties of PTFE material. The disclosed gasket material has numerous benefits over previous flange sealing material. Among the improvements are better sealing and longer life demonstrated by improved durability in environments of harsh chemicals and/or extreme temperatures and temperature cycling (Col 3, lines 65-67 and Col 4, lines 1-6, 15-20). In view of this teaching it would have been obvious for one of ordinary skill to have used the gasket material disclosed by Barna et al motivated by the desire to use a gasket material that is

Art Unit: 1764

more durable.

4. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,053,348 to Morch in view of US 5,997,003 to Turner further in view of US 6,003,461 to Blanchette et al.

Per claim 8 and 17: Morch and Turner fails to teach that the lid is hollow and contained insulation inside. Blanchette et al teach a bulk head door to with an insulating foam core (Fig.1, item 12). Since Morch teaches a lid used on a lorry tank which can be used in cryogenic applications, having provided the lid of Morch with a hollow lid filled with an insulating foam would have been obvious to one of ordinary skill in the art. One of ordinary skill would have been motivated by the desire to prevent maintain an even temperature in a container tank filled with cryogenic material.

Although Morch, Turner and Blanchette et al fails to teach that such a hollow lid filled with insulation has a domed top and flat bottom, it would have been an obvious matter of design choice to have used the claimed shape.

Prior Art of Record

5. The prior art of record and not relied upon is considered pertinent to Applicant's disclosure. In addition, the following references are cited for disclosing various aspects of Applicant's invention:

US 3,915,462
US 5,988,423
US 2,883,084
US 1,124,606
US 3,441,166

Allowable Subject Matter

Art Unit: 1764

6. Claims 3,6,7,15 and 16 are found to be allowable. The following is a statement of reasons for the indication of allowable subject matter: Per claim 3: No prior art has been found to teach or suggest using two tracks. In particular, using two tracks would have necessitated an extensive redesign of Morch's lid apparatus. Without the use of hindsight, it would not be possible to arrive at Applicant's claimed structure ~~without~~ ~~relying on hindsight~~. Per claim 6: No prior art has been found to teach or suggest the limitations of claims 6,7,15 and 16. In particular, claims 6,7,15 and 16 would necessitate altering the structure of the primary reference, i.e. Morch to such a degree that Morch's intended utility, that of an automated lid assembly would not have been realized. As a result, it would not have been possible to have derived Applicant's claimed invention as commensurate in scope with claims 6,7 15 and 16 without relying on hindsight reasoning.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700